

7. (Previously Presented) The method of claim 6, further comprising:
determining a threshold as a function of the peak value.

8. (Currently Amended) ^{An apparatus} ~~A system~~, comprising:
a correlator for computing an ensemble correlation function [[output]] from a plurality of received symbols; [[and]]
^{Comparator} ~~a subtractor~~, operatively coupled to the correlator, for determining a valid sampling region based on a width of a plateau of the ensemble correlation function [[output]]; and
a sampling position selector, operatively coupled to the correlator, for determining at least one sampling position for at least one symbol based on the valid sampling region.

9. (Currently Amended) ^{apparatus} ~~The system~~ of claim 8, further comprising:
a filter, operatively coupled to the correlator, for filtering the ensemble correlation function [[output]].

10. (Currently Amended) ^{apparatus} ~~The system~~ of claim 9, further comprising:
a maximum detector, operatively coupled to the filter, for determining a peak value included in the filtered ensemble correlation function [[output]].

11. (Currently Amended) ^{apparatus} ~~The system~~ of claim 8, further comprising:
^{subtractor} ~~a comparator~~, ^{comparator} ~~operatively coupling the correlator to~~
~~the subtractor and the sampling position selector, for comparing the ensemble~~ ^{subtracting a width of}
~~correlation function [[output]] to a threshold to define the valid sampling region~~ ^{from a}
^{length of a cyclic extension of a symbol to obtain an estimate of a}
~~delay-spread.~~

12. (Original) ^{apparatus} ~~The system~~ of claim 8, for use in a receiver.

13. (Original) ^{apparatus} ~~The system~~ of claim 12, wherein the receiver is wireless.

14. (Original) The ~~system~~^{apparatus} of claim 8, further comprising:
at least one phase locked loop for tracking edges of the plateau.
15. (Currently Amended) A method for estimating [[delay spread]] delay-spread
in a communication system using cyclic extension of a plurality of symbols, the
method comprising:
 computing an ensemble correlation function [[output]] from the plurality of
 symbols; and
 using the ensemble correlation function [[output]] to estimate the
 delay-spread.
16. (Currently Amended) The method of claim 15, further comprising:
 comparing the ensemble correlation function [[output]] to a
threshold to define a valid sampling region; and
 subtracting a width of the valid sampling region from a length of
the cyclic extension of a symbol to obtain the estimate of the [[delay spread]] delay-
spread.
17. (Currently Amended) The method of claim 15, further comprising:
 filtering the ensemble correlation function [[output]].
18. (Currently Amended) The method of claim 17, further comprising:
 using a median filter to filter the ensemble correlation function [[output]].
19. (Currently Amended) The method of claim 15, further comprising:
 determining a peak value included in the ensemble correlation function
[[output]].

20. (Previously Presented) The method of claim 19, further comprising:
determining a threshold as a function of the peak value.
21. (Currently Amended) The method of claim 16, wherein threshold crossing points of the ensemble correlating function [[output]] define the valid sampling region.
22. (Currently Amended) ^{An apparatus}~~A system~~ for estimating delay-spread in a communication system using cyclic extension, comprising:
a correlator for computing an ensemble correlation function [[output]] from a plurality of symbols; and
a delay-spread estimator, operatively coupled to the correlator, for estimating the delay-spread.
23. (Currently Amended) ^{apparatus}~~The system~~ of claim 22, wherein the [[delay spread]] delay-spread estimator includes:
a comparator, operatively coupled to the correlator, for comparing the ensemble correlation function [[output]] to a threshold to define a valid sampling region; and
a subtractor, operatively coupled to the comparator, for subtracting a width of the valid sampling region from a length of the cyclic extension of [[the]] a symbol to obtain the estimate of the [[delay spread]] delay-spread.
24. (Currently Amended) ^{apparatus}~~The system~~ of claim 22, further comprising:
a filter, operatively coupled to the correlator, for filtering the ensemble correlation function [[output]].

25. (Currently Amended) The ~~system~~^{apparatus} of claim 24, further comprising:
a maximum detector, operatively coupled to the filter, for determining a peak value included in the filtered ensemble correlation function [[output]].
26. (Original) The ~~system~~^{apparatus} of claim 22, for use in a receiver.
27. (Original) The ~~system~~^{apparatus} of claim 26, wherein the receiver is wireless.
28. (Currently Amended) A method for adapting a receiver in a communication system using cyclic extension of a plurality of symbols, the method comprising:
computing an ensemble correlation function [[output]] from the plurality of symbols;
determining a multipath channel characteristic based on the ensemble correlation function [[output]]; and
adapting the receiver based on the multipath channel characteristic.
29. (Original) The method of claim 28, wherein the multipath channel characteristic is delay-spread.
30. (Original) The method of claim 28, wherein the step of adapting comprises:
determining one or more coefficients of a channel estimation filter in the receiver.